

§ 56.30–20 Threaded joints.

(a) Threaded joints may be used within the limitations specified in subpart 56.15 of this chapter and within other limitations specified in this section.

(b) (*Reproduces 114.1.*) All threads on piping components must be taper pipe threads in accordance with the applicable standard listed in 46 CFR 56.60–1, Table 56.60–1(b). Threads other than taper pipe threads may be used for piping components where tightness of the joint depends on a seal weld or a seating surface other than the threads, and where experience or test has demonstrated that such threads are suitable.

(c) Threaded joints may not be used where severe erosion, crevice corrosion, shock, or vibration is expected to occur; or at temperatures over 925 °F. Size limitations are given in Table 56.30–20(c) of this section.

TABLE 56.30–20(c)—THREADED JOINTS ^{1,2}

Maximum nominal size, inches	Maximum pressure, p.s.i.g.
Above 2"	(Not permitted in Class I piping service.)
Above 1" up to 2"	600.
Above ¾" up to 1"	1,200.
¾" and below	1,500.

¹ Further restrictions on the use of threaded joints appear in the low temperature piping section.

² Threaded joints in hydraulic systems are permitted above the pressures indicated for the nominal sizes shown when commercially available components such as pumps, valves and strainers may only be obtained with threaded connections.

(d) No pipe with a wall thickness less than that of standard weight of ASME B36.10M (incorporated by reference; see 46 CFR 56.01–2) steel pipe may be threaded regardless of service. For restrictions on the use of pipe in steam service more than 250 pounds per square inch or water service over 100 pounds per square inch and 200 °F (938C), see part 104.1.2(c)(1) of ASME B31.1 (incorporated by reference; see 46 CFR 56.01–2). Restrictions on the use of threaded joints apply for low-temperature piping and must be checked when designing for these systems.

[CGFR 68–82, 33 FR 18843, Dec. 18, 1968, as amended by CGFR 69–127, 35 FR 9978, June 17, 1970; CGD 73–254, 40 FR 40164, Sept. 2, 1975; CGD 77–140, 54 FR 40606, Oct. 2, 1989; USCG–2003–16630, 73 FR 65178, Oct. 31, 2008]

§ 56.30–25 Flared, flareless, and compression fittings.

(a) This section applies to pipe fittings that are mechanically connected to pipe by such means as ferrules, flared ends, swaging, elastic strain preload, crimping, bite-type devices, and shape memory alloys. Fittings to which this section applies must be designed, constructed, tested, and marked in accordance with ASTM F 1387 (incorporated by reference, see § 56.01–2). Previously approved fittings may be retained as long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

(b) Flared, flareless and compression fittings may be used within the service limitations of size, pressure, temperature, and vibration recommended by the manufacturer and as specified in this section.

(c) Flared, flareless, and compression type tubing fittings may be used for tube sizes not exceeding 50 millimeters (2 inches) outside diameter within the limitations of applicable standards and specifications listed in this section and § 56.60–1 of this part.

(d) Flareless fittings must be of a design in which the gripping member or sleeve must grip or bite into the outer surface of the tube with sufficient strength to hold the tube against pressure, but without appreciably distorting the inside tube diameter or reducing the wall thickness. The gripping member must also form a pressure seal against the fitting body.

(e) For fluid services, other than hydraulic systems, using a combustible fluid as defined in § 30.10–15 of this chapter and for fluid services using a flammable fluid as defined in § 30.10–22 of this chapter, flared fittings must be used; except that flareless fittings of the nonbite type may be used when the tubing system is of steel, nickel copper or copper nickel alloy. When using copper or copper zinc alloy, flared fittings are required. (See also § 56.50–70 for gasoline fuel systems, § 56.50–75 for diesel fuel systems, and § 58.25–20 for hydraulic systems for steering gear.)

[CGD 95–027, 61 FR 26000, May 23, 1996; 61 FR 35138, July 5, 1996, as amended by USCG–1999–5151, 64 FR 67180, Dec. 1, 1999; USCG–2000–7790, 65 FR 58460, Sept. 29, 2000]